

A smooth variety of this species is found associated with *Quadrula aurea* Lea. In this variety there are only a few small pustules near the umbones and in some specimens even these are lacking. Specimens identified by F. C. Baker and Bryant Walker. Several pustulous shells of this species that were supposed to have been collected in this county, prove to have come from southern Illinois.

Lampsilis purpuratus Lamarck (Variety).

A number of shells from near Mussel Island in the North Bosque River were first identified as typical *L. purpuratus* Lk. Later examples of the same type were identified as typical *L. berlandieri* by Dr. W. S. Strode and Mr. Bryant Walker. The last-mentioned gentleman found three different forms in a second sending from the same locality. These he designates as

Lampsilis berlandieri Lea.

Lampsilis berlandieri Lea var.

Lampsilis purpuratus Lamarck var.

The variety of *L. berlandieri* Lk., is very variable in the color of the nacre which ranges from white, through pink and salmon, to dark purple. These shells were found in the ripples above Mussel Island while the examples of the typical form and the specimens of *L. purpuratus* var., were found in a large bed some distance below.

DESCRIPTIONS OF NEW SPECIES OF ACHATINELLIDAE, FROM THE HAWAIIAN ISLANDS.

BY D. D. BALDWIN.

Partulina winniei n. sp.

Shell sinistral, subperforate, rather thin, elongately conical, apex subacute; surface shining, striated with fine growth lines, and under a lens showing very close and delicate decussating spiral striæ; nuclear whorls faintly decussated. Color white, striped and mottled irregularly with longitudinal dark brown streaks; apex white. Whorls 6, slightly convex, margined above. Aperture oblique, oval, purplish-white within. Peristome acute, thickened within, columellar margin reflexed. Columella terminating in a slight, flexuous, white fold.

Length 16; diam. 8 mm.

Habitat, Kahakuloa, West Maui.

This shell is the Maui counterpart of *Part. theodori*, Bald., a much larger shell found on the Island of Molokai.

Named in honor of Miss Winnie of Walluku, Maui.

Partulina mutabilis, n. sp.

Shell dextral or sinistral, minutely perforated, somewhat solid, acuminate conical, apex subacute; surface shining, marked with delicate incremental striæ, under a lens exhibiting very close decussating, spiral striæ; apical whorls smooth. Color varying from pure white to dark fulvous, often variously striped with brown lines and bands, some on the base and others spiral. Whorls 6, convex, margined above, suture well impressed. Aperture oblique, oval, white within, columella margin reflexed. Peristome acute, thickened within. Columella terminating in a well-developed, flexuous white fold.

Length 16; diam. 10 mm.

Habitat, Waichu Valley, West Maui.

This shell seems to be the Maui counterpart of *Partulina variabilis*, Nc. a larger shell which is found on the neighboring island of Lanai.

Laminella duoplicata, n. sp.

Shell sinistral, sometimes slightly perforated, thin, elongately conical, apex obtuse; surface shining, marked with fine growth striæ, nuclear whorls smooth. Color light yellow, marked with somewhat regular black lineations, apex black, whorls six, convex; suture well impressed. Aperture a little oblique, oval, white within. Peristome simple, very thin. Columella white, biplicate, the terminal plication a thin, oblique lamellar plait, the inner one less prominent.

Length 12; diam. 6 mm.

Habitat, Waichu Valley, West Maui.

This and the following species are important additions to the Laminellæ of Maui. The only previously described Maui species of this section are *Lam. picta*, Migh., *Lam. alexandri*, Nc. and *Lam. erecta* Pse.

Laminella aspera, n. sp.

Shell sinistral, minutely perforated, thin, conical, apex obtuse,

surface exhibiting very coarse and irregular growth striæ. Color yellow, plain or marked with irregular black lineations, apex black. Whorls 6, convex; suture well impressed. Aperture a little oblique, sub-rotund, yellowish within. Peristome simple, very thin. Columella white, biplicate, not prominent.

Length 10; diam. 7 mm.

Habitat, Wailuku valley, West Maui.

This species is remarkable for the very coarse and irregular growth striæ exhibited on its surface.

Cotypes of these species deposited in the Acad. Nat. Sci. Phila. will be figured in the next volume of the Manual of Conchology.

THE MIOCENE SPECIES OF LYMNÆA.

BY T. D. A. COCKERELL.

In Bull. Am. Mus. Nat. Hist., Dec., 1906, I described two small species of *Lymnæa* from the miocene beds of Florissant. In 1907, at station 1, I found a much larger species, unfortunately not in the best state of preservation. I hoped to find more material in 1908, but as none was obtained, a description from the original type is now offered.

Lymnæa florissantica, n. sp.

Length 21 mm.; diameter about $10\frac{1}{2}$; spire short, scarcely over 5 mm. long, the whorls moderately convex; body-whorl not very convex, with coarse, shallow, vertical grooves. In Baker's key in his Mollusca of the Chicago Area, it runs nearest to *L. palustris*, but it is not at all like that species. It is in reality a miocene representative of *L. emarginata*. In Mr. O. O. Nylander's series of figures of *L. emarginata* (published by the author in a pamphlet, 1901), it closely resembles Pl. 1, f. 7, except that it is distinctly more slender, and the base is narrower, about as in fig. 8, though the rest of the shell is not at all like fig. 8.

The following table separates the miocene species of *Lymnæa*.

Spire short and rather obtuse,	
body-whorl large	1.